

(c) Remarks:

The claims are 1-10 with claim 1 being independent. Non-elected claims 7-10 were cancelled without prejudice to the filing of a divisional. The subject matter of claims 2 was added to claim 1 and claim 1 modified as to form. Reconsideration of the claims is requested.

Claims 1-6 were rejected under Rule 112, second paragraph in that there was no claimed relation between the noble metal and the oriented layer. Claim 1 was amended to include the noble metal in the oriented layer.

Claims 1-5 were rejected as anticipated by Futamoto '453. Claims 1 and 4-5 were rejected as anticipated by Lee '926. The rejections are respectfully traversed.

Before addressing the grounds of the art rejection applicants wish to briefly review the structure and advantages of the present claimed invention. A thin film of a noble metal tends to show (111) orientation when sputtered regardless of the substrate material. However, a (001) oriented layer of a noble metal is desired to better control orientation of a recording layer, but without utilizing high substrate temperatures on the order of 600 °C and oxygen addition. The present invention solves the problem by employing an MgO (100) substrate layer on which a group 4A metal layer is deposited and, thereafter, an oriented layer containing a noble metal is formed on the Group 4A metal layer. In the Examples at a substrate temperature as low as 250 °C it was shown that orientation of the noble metal containing layer was at least 99%.

In Futamoto '453 the recording medium is laminated, in order, as a Group 4A metal layer 13, a polycrystalline MgO film 14 and a noble metal layer 15. As disclosed in Col. 4, lines 34-41 the recording medium employed, *inter alia*, as soft magnetic backlayer 13 using Co-Nb-Ta, a MgO film 14 and a CoZo, Cr-10, Pt-1.5-Ta perpendicular magnetic layer 15. The

use of the MgO is not to reduce substrate temperature, but is to increase perpendicular magnetic anisotropy (Col. 3) by promoting growth orientation and reduce noise.

Lee '926 does not disclose an MgO (001) layer on which the Group 4A metal and noble metal layer are deposited. In the Examples of Lee a glass substrate was employed on which typically a Ti-underlayer, a Pt perpendicular magnetic enhancement layer and a NiFe or CoCr magnetic layer were deposited. Therefore, no MgO (001) layer is present on which the Ti and Pt layers are deposited. Therefore, no anticipation *prima facie* case is raised.

The claims should be allowed and the case passed to issue.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

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